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Egypt and the Uruguay Round

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Although the Uruguay Round will generally have a limited impact on Egyptian policies affecting goods, investment and services, commitments by Egypt can be seen as facilitating the move toward a free trade agreement with the European Union.

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Summary findings

The Uruguay Round will generally have a limited impact on Egyptian policies affecting goods, investment, and services. It will have a more significant impact on intellectual property, although this will take up to a decade to materialize fully.

Insofar as this reflects a continuing defensiveness against liberalization, it does not bode well for a country that will be facing growing competitive pressures as the world economy becomes more integrated. But Egypt's Uruguay Round commitments do, to a large extent, lock in the policy changes pursued by the government since the late 1980s. In this respect, they are quite significant. Maximum tariffs have been established for almost all tariff lines, and the gap between these "bindings" and the

level of applied tariffs is in most cases relatively small. This constitutes a level of commitment that substantially exceeds the developing country average.

The government is negotiating a more far-reaching agreement with the European Union to liberalize trade on a reciprocal basis. Commitments by Egypt in the Uruguay Round can be seen as facilitating implementation of a Euro-Mediterranean Agreement. Such an agreement could facilitate further nondiscriminatory liberalization of Egypt's trade regime. Of particular importance in this connection is opening service markets to greater competition, where much remains to be done.

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1. Introduction

Until recently, multilateral trade negotiations held under auspices of the General Agreement on Tariffs and Trade (GATT) involved primarily industrialized nations, reflecting the decision on the part of most developing countries to demand "special and differential" treatment. This implied that reciprocal concessions were not offered in GATT negotiations, with the result that these mostly centered on topics (products) of interest to industrialized countries. Developing countries' stance towards the GATT changed in the 1980s, under the influence of the debt crisis, the demonstration effect of the benefits of the neutral, export oriented strategy taken by the dynamic economies of South-east Asia, and the collapse of central planning. As national trade policies became more liberal and the interest in obtaining better access to industrialized country markets expanded, the willingness to engage in reciprocal bargaining in the GATT forum increased. This was reflected in the greatly increased participation by developing countries in the Uruguay Round.

Egypt has always played a prominent role in the GATT. It participated actively in the Uruguay Round and made a number of commitments. As was the case with many developing countries, Egypt pursued unilateral liberalization concurrently with the Uruguay Round under programs supported by the World Bank (the ERSAP) and the International Monetary Fund (the Standby and EFF). These unilateral efforts were a key factor allowing Egypt to be fully involved in the negotiations.

Whether and to what extent Egypt will benefit from the full implementation of the Uruguay Round package is difficult to say, although this paper makes an attempt at assessing the impact in some areas. There are a number of uncertainties: transition periods for the abolition of the MFA and agricultural liberalization by OECD countries are relatively long, and tariffs on these items will remain high for the foreseeable future. Conversely, against the small market access gains--especially if discounted for the length of the transition--Egypt could be confronted with transitional costs associated with the implementation of the TRIPs Agreement. As a net food importing country, Egypt may also be confronted with an adverse terms of trade shock if global prices for certain agricultural commodities rise following the reduction in OECD subsidization. More generally, the significance of greater access to export markets granted by industrialized countries will depend importantly on the use that is made of instruments of contingent protection such as antidumping. Not much was achieved in terms of disciplining the use of such policies.

Partly as a result of such uncertainties/issues, many Mediterranean countries are actively pursuing the offer of the European Union (EU) to negotiate free trade agreements. Such a Euro-Mediterranean Agreement (EMA) may allow Egypt to reduce the threat of EU contingent protection--a major trading partner--and facilitate further liberalization of the trade regime. General recognition exists that such liberalization is necessary. The world economy is becoming increasingly integrated, with trade and foreign direct investment (FDI) more often being complements than substitutes. Given the pursuit of liberal and market-oriented regulatory regimes in many parts of the developing world, including Eastern Europe and parts of Central Asia, it has become a matter of some urgency that countries such as Egypt do not lag too far behind. Given the political desire to gradually liberalize the economy, an agreement with the EU offers one way to credibly commit to far-reaching reform over a long transition path. The commitments that were made in the Uruguay Round by Egypt can be seen as facilitating the move towards an EMA.

This paper discusses the results of the Uruguay Round for Egypt, explicitly taking into account the Government's decision to negotiate a more far-reaching economic agreement with the EU. It is structured as follows. Section 2 provides an assessment of Egypt's market access commitments in

industry and agriculture. Sections 3, 4 and 5 focus on intellectual property rights, trade-related investment measures, and services, respectively. They summarize the main elements of the disciplines as they will impact on Egypt. All three issues are not only important topics in themselves, but are likely to play a key role in the EMA context. To a large extent Egyptian commitments in these areas establish the point of departure for the EMA. Section 6 briefly surveys the areas where multilateral disciplines are weak or non-existent, and the possible role of an EMA as opposed to the WTO in addressing these lacunae. Section 7 concludes.

2. Impact of Market Access Commitments in Manufacturing and Agriculture

1. Egypt's market access commitments

(a) Tariff Bindings: At the heart of a country's liberalization commitments in the WTO are tariff bindings, which are commitments by a member not to raise its tariffs beyond "bound" levels without consulting and/or compensating^{1/} its trading partners. A binding contributes to greater predictability of trade policies and hence to greater certainty in trade and investment decisions that depend on these policies. As argued by Francois and Martin (1994), tariff bindings can also lead to significant improvements in market access conditions by simply truncating the range of protection that is permissible.^{2/}

Prior to the Uruguay Round, Egypt had bindings on about 3 percent of tariff lines.^{3/} During the Round, Egypt agreed to bind 100 percent of its tariff lines in agriculture (as was required of all countries); and about 97 percent of its Harmonized System (HS) 4-digit tariff lines (1,015 out of 1,046) in the industrial sector (Table 1). This is a significant step forward in terms of Egypt's integration into the trading system compared both to the past, but also to other developing countries which bound on average only about 73 percent of their tariff lines in industry.^{4/} In terms of bindings, Egypt's commitments approach those of many OECD countries. This should provide some insurance against future reversal of trade policy, yielding efficiency benefits domestically and market access benefits to Egypt's trading partners.

Under the Uruguay Round, countries were also required to "bind" any other duties and charges applied to imports and list these in their Uruguay Round tariff schedules. Egypt has inscribed only a few other duties and charges on agricultural goods in its schedule, effectively committing itself to a relatively transparent tariff regime.^{5/} It should also be noted that, unlike some industrial countries, Egypt's tariff schedule has very few specific tariffs (on only 14 tariff lines), all relating to cigarettes and tobacco-related products. This too should contribute to a more transparent trade regime.

^{1/} Compensation usually involves lowering other tariffs to offset tariffs that have been increased.

^{2/} Much depends in this connection on the holes and loopholes in the multilateral agreement that allow for the imposition of protection in particular circumstances.

^{3/} Although Egypt had bound about 15 percent of its tariff lines prior to 1990, the tariffs announced in 1991 exceeded the bound rates on a number of tariff lines, effectively reducing the extent of real bindings.

^{4/} The 73 percent refers to the average of 26 developing countries included in the WTO Integrated Database.

^{5/} Egypt does, however, levy a customs user fee (some times called an import surcharge) at rates of 2 and 5 percent. The status of this fee/charge in light of the Round and Egypt's market access commitments is unclear.

After full implementation of Uruguay Round commitments in 2005, Egypt's final bound tariffs will average about 62 percent in agriculture, 32 percent in industry, and about 37 percent overall (Table 1).^{1/} The average bound tariff in 2005 will be greater than the current applied tariff by about 5 percentage points in both agriculture and industry. However, if Egypt successfully implements its current program of tariff reform, by the end of December 1995, the margin between the future bound tariff and the applied tariff will be about 11 percentage points in both agriculture and industry. The implication is that, on average, the "water in the bound tariff"--the margin for Egypt to raise its applied tariff without breaching its Uruguay Round commitments--will be about 11 percentage points. This is in contrast to many other developing countries which have a much larger gap between bound and applied tariffs.^{2/} Ideally, the bound tariff should be equal to the applied tariff, which would enhance the locking-in effect of tariff bindings. Although Egypt is still far away from this ideal, it has nevertheless reduced its margin for reversing trade liberalization by binding its tariffs at "reasonable" levels.

How much incremental tariff liberalization is implied by Uruguay Round commitments? True liberalization occurs if the applied rate at the end of the current reform in December 1995 is greater than the final bound rate. This will be the case for about 10 percent of all tariff lines (excluding the textiles and clothing sector). For these lines, the average tariff reduction was about 11 percentage points, with slightly larger tariff reductions in the industrial sector, yielding average price reductions in the domestic market of about 6 percent (Table 1). Thus, Egypt's Uruguay Round commitments will lead to some, albeit limited, incremental liberalization.

While the gap between bound and applied tariffs is not unduly large, the level of applied tariffs remains high. The current unweighted average tariff is about 27 percent for industry, 56 percent in agriculture, and 32 percent overall (including beverages). Even if the current program of tariff reform is completed, tariff levels will remain very high. The average tariff in many other developing countries does not exceed 15 percent (Hoekman, 1995a). Maintaining such high rates impose significant costs on the Egyptian economy in terms of lost consumer welfare, anti-export bias, and rent-seeking opportunities. As discussed below, it also implies that the trade diversion costs of a free trade agreement with the EU could be substantial.

(b) Quantitative restrictions on imports: Under the Round, Egypt (like all countries) has committed to eliminate all quantitative restrictions (QRs) on agricultural imports. However, QRs existed only selected poultry products, which were expected to be eliminated in any event. In addition, Egypt has committed to eliminating QRs on 95 4-digit tariff lines in the textiles and clothing sector, which account for about 8 percent of all tariff lines. These restrictions will be eliminated over a 5-year period for textiles and a 10-year period for clothing. Thus, it is expected that no QRs (except for those maintained on health and security grounds) will remain at the end of the Uruguay Round implementation period.

^{1/} In addition to specifying final bound tariffs, Egypt's schedules also contain the sequencing of tariff reductions. For industrial products other than textiles and clothing, the initial bound tariff is $(f+10)$ percent (where f is the final bound tariff), which is reduced in five equal annual installments; for textile and clothing products, the initial bound tariff is $(f+30)$ percent, reduced over ten years in equal installments. In agriculture, the initial bound tariff is specified in the schedule and will be reduced over ten years in equal annual installments.

^{2/} See Table 5 in Harmsen and Subramanian (1994).

2. Effect of Uruguay Round on Egypt's food imports

Egypt is a large net food importer. Its key agricultural imports comprise wheat, flour, maize, edible oil, sugar, animal fats, and tea (Table 2). In 1993/94, imports of these items together exceeded \$1.2 billion. Egypt had a key role in the Uruguay Round negotiations in seeking recognition of the possibility that terms of trade losses could be inflicted on net food importers, and in calling for steps to mitigate such losses. Table 2 shows the quantitative impact of estimated changes on the food import bill.^{1/} For some of Egypt's imports (for example, edible oil, tea, and animal fats) food prices are expected to fall. Under the more adverse scenario, total food imports are likely to be \$26 million higher in 2001/02 (measured in 1993/94 U.S. dollars or \$32.8 million measured in 2001/02 dollars) than they would otherwise have been. This represents about 2.0 percent of total food imports (about 0.3 percent of total imports) in 1993/94. Under the alternative scenario, food imports are likely to be negligibly higher because of the Uruguay Round than otherwise. In the intervening years, (i.e., up to 2001/02), the impact is likely to be insignificant.^{2/}

3. Impact on Egypt's exports of liberalization by partner countries

Three market access effects will bear upon Egypt's exports: those from MFN tariff cuts, those from loss of preferential margins due to MFN tariff cuts, and those from the liberalization of the MFA. The estimated results of these three effects on exports are summarized in the memorandum items of Tables 3-5.^{3/} They indicate that the most important impact of the Uruguay Round will derive from the liberalization of textiles and clothing quotas. In 2005, exports of these items to the United States and the EU will be about \$218 million (based on average 1990-92 values) higher than in the absence of the Round. Of this increase, about 76 percent (\$165 million) will be accounted for by exports to the EU and the remainder by exports to the United States.

Egypt's exports under non-preferential conditions accounts for about 38 percent of total non-oil exports to the three markets covered in the analysis. This share is greatest in the U.S. market (about 84 percent), followed by Japan (57 percent) and the EU (about 27 percent) where Egypt's exports are predominantly accounted for by textiles and clothing products (Yeats, 1994). In general, the benefits from MFN tariff reductions are quite small not only because of the extent of preferential access, but also because of the limited nature of tariff cuts. For example, in the EU market the weighted average price reductions stemming from MFN tariff cuts are 1.2 percent compared with reductions of 3.2 percent on products that benefit from preferences. In aggregate, MFN tariff reductions are predicted to lead to increased exports of about \$4 million (or about 1.3 percent of non-preferential exports to the three major markets).

^{1/} The impact is analyzed under two scenarios. Under the adverse scenario (scenario II), food price rises are generally higher than the alternative scenario (scenario I) because the liberalization attributed to the Round is greater; this results from the assumption that in the absence of the Round, levels of agricultural protection would have been the average level prevailing between 1991 and 1993. Under the alternative scenario, the counterfactual is that such protection levels would have been the average level between 1982 and 1993.

^{2/} Higher food costs, which will be borne by consumers, are likely to increase gradually as liberalization by the major producing countries is phased in over the six-year implementation period.

^{3/} These effects are based on very simple partial equilibrium models, and should be treated with caution. For details see Shiells, Subramanian, and Uimonen (1995).

Preferential exports account for about 13 percent of total non-oil exports to the three major markets covered in the analysis.^{1/} While the reduction in preferential margins is larger than the MFN tariff reductions, the loss in exports in the three major markets due to this effect is estimated at about \$2 million (or 2 percent of preferential exports). Thus, excluding textiles and clothing, the loss in exports from the erosion in preference margins is outweighed by the gains from tariff reductions on items subject to MFN trade, although the difference is insignificant and both effects are very small.

3. Intellectual Property Rights^{2/}

A major result of the Uruguay Round was the Agreement on Trade Related Intellectual Property Rights (TRIPs). Protection of intellectual property (IP) has become increasingly prominent in policy dialogue recent years, and can also be expected to figure in any trade agreement with the EU. This section summarizes some of the key provisions of the TRIPs agreement and discusses possible implications for Egypt.

1. TRIPs in a Nutshell

(a) General obligations: The most important general obligation under the TRIPs agreement is national treatment, which requires all members to treat nationals of other countries no less favorably than their own nationals on all IP matters—standards, enforcement, and acquisition—subject to certain exceptions (Article 3). This obligation is not likely to require legislative changes, as most countries, including Egypt, already grant national treatment in their domestic laws.^{3/}

(b) Patents: Perhaps the most difficult issue in the negotiations was the demand to provide protection for pharmaceutical products. It was in this sector that patent regimes differed most starkly, with several developing countries such as Egypt providing very little or virtually no protection for pharmaceutical products, while industrial countries had strong patent regimes and were seeking to further strengthen them by increasing the term of protection.

Under TRIPs, no field of technology can be excluded from patent protection, effectively disallowing any exemption for pharmaceuticals from protection (Article 27.1). Further, all countries have to provide a minimum term of protection of 20 years (Article 33). There is also a tight non-discrimination provision (Article 27.1) that would have important economic implications: it would disallow discrimination in the grant of protection (such as certain features of the US first-to-invent system), it would prevent more permissive rules for compulsory licensing in the pharmaceutical sector,

^{1/} Although preferential exports to the EU are lower in the simulation exercise than that reported in the SMART database, the latter is recognized as overstating the extent of preferential treatment. This is because quotas or ceilings may be applied to products receiving GSP treatment, with normal MFN rates applying to exports above these ceilings.

^{2/} This section draws heavily on Subramanian (1995a, 1995b). For an overview of the issues and the outcome of negotiations, see also Primo Braga (1995).

^{3/} The second general obligation—an innovation in the field of IP—is that of most-favored-nation (MFN) treatment (Article 4). This requires countries to treat nationals of any one country no less favorably than nationals of another country. MFN has limited significance in the IP area as it is irrelevant once national treatment is granted. MFN becomes operative only when a country is treating nationals of another country more favorably than its own nationals; in such an event MFN becomes necessary to prevent discrimination between foreigners.

and finally, it would prevent countries from requiring, under the threat of compulsory licensing, that a patentee should "work" the invention locally (the latter amounts to a requirement that demand in a market be met by local production rather than through imports). Finally, while TRIPs does not specify when a compulsory license may be granted (except to disallow compulsory licenses for non-working), some important conditions are laid down that must be fulfilled when it is granted (Article 31). Notable among these are the requirements to establish that normal channels of obtaining a voluntary license have proved unsuccessful (Article 31.(b)) and that the patentee be provided adequate compensation for a compulsory license (Article 31.(h)).

To comply with TRIPs, Egypt will have to undertake extensive reform of its patent laws in each of the areas described above to protect pharmaceutical products, plant varieties, and biotechnological products, to increase the term of patent protection to 20 years, and to eliminate the discrimination in the system of compulsory licensing against pharmaceutical inventions and against imported patented products.

(c) Copyright and related rights: Copyright protects the artistic and literary works of authors (which includes authors of books, music, and films). It protects the expression of ideas rather than the ideas themselves. The Berne Convention is the most important agreement in this area and contains high standards of protection, including a broad definition of authorship and a term of protection equal to the lifetime of the author plus fifty years. Related rights protect the output of phonogram producers (i.e., the music industry), of performers, and of broadcasting organizations; protection for such rights is embodied in the Rome Convention.

The TRIPs provisions on copyright and related rights will require adherence by all TRIPs signatories to the Berne Convention, ^{1/} except for its provision on "moral rights". In addition, countries will have to protect computer programs and databases as literary works, establishing an international consensus in this regard (Article 10). TRIPs will require the introduction of an exclusive rental right—the right to prevent unauthorized rentals—for computer programs and sound recordings, and a conditional rental right for films, where commercial rental of films leads to widespread copying, impairing the economic benefits that accrue to the right holder (Article 11). TRIPs also requires the introduction of performers' rights, which is more limited than that found in the Rome Convention (Article 14); however, a significant addition will be the extension of the term of protection of sound recordings from 20 to 50 years (Article 14.5).

Although Egypt is a member of the Berne Convention, it will have to introduce legislation to bring it into conformity on all other scores mentioned in the previous paragraph.

(d) Integrated Circuits: Protection for semi-conductor chips—the basic building block of the modern electronics industry—is currently absent in most countries. Thus Egypt like nearly all developing countries will need to introduce laws to grant protection not just in accordance with the provisions of the unratified Washington Treaty (Article 35), but to go further in some important respects. These include increasing the term of protection for chips to 10 years (Article 38) and tightening the conditions of compulsory licensing in conformity with TRIPs (Article 37.2).

^{1/} TRIPs also clarifies a provision of the Berne Convention by specifying that where the creator of a work is a corporation, the term of protection should not be less than 50 years.

Egypt will have to introduce a system for the protection of integrated circuits as there is currently no protection for this form of IPRs.

(f) Undisclosed Information and Test Data: Prior to TRIPs, there were no clear international rules concerning the protection of undisclosed information or trade secrets (a good example of a trade secret is the formula for producing Coca Cola). Developing countries were reluctant to recognize or concede the principle that trade secrets were an IPR; in their view, trade secrets did not fulfil one of the prerequisites of an IPR, namely, the obligation on the part of the right holder to disclose the "secret." The main obligation under TRIPs in this regard is only to prevent the acquisition, use or disclosure of information in a manner contrary to honest commercial practices (Article 39). This feature is found, in one form or another, in most countries' laws on unfair competition, including that of Egypt.

(g) Anti-competitive practices and contractual licenses: Developing countries' wariness of IP protection stemmed from the belief that monopolistic control over technology, facilitated by IP protection, would increase the price of and limit access to foreign technology, thereby impeding its transfer and diffusion. Strong IP protection was argued to strengthen the hands of foreign technology owners in negotiations with developing country users over voluntary licenses. One way of redressing this monopoly power would be to prohibit certain practices that are egregious manifestations of monopoly control over technology. The TRIPs agreement reflects developing countries' concerns by: (i) recognizing their right—that they have always had—to specify in their domestic legislation anti-competitive licensing practices or conditions that constitute an abusive use of IPRs (Article 40.2); (ii) also recognizing the right to take remedial measures against anti-competitive practices as long as these are consistent with the Agreement; and (iii) obliging countries to consult with each other and exchange information in order to facilitate the enforcement of national laws against companies whose activities straddle borders (Articles 40.3 and 40.4).

(h) Enforcement: The TRIPs provisions on enforcement are unique in that they represent the first set of comprehensive, multilateral rules not just in the area of IP, but in any area. The broad objectives of the TRIPs enforcement provisions embodied in Article 41 are twofold: to provide for the effective national enforcement of IP laws, while ensuring that enforcement does not become abusive or overzealous, creating non-tariff barriers through harassment of legitimate trade. The most important point to note about enforcement is that the basic responsibility or obligation of countries under the TRIPs agreement is not to take action themselves to prevent infringing activity, but to put in place procedures and remedies that enables right holders to do so. Hence, the primary responsibility for initiating action aimed at enforcement is left to private right holders. The popular portrayal that the mere fact of infringing activity in a country makes that country susceptible to multilateral trade sanctions is simply wrong. A country can be successfully challenged in the WTO for infringing activity within its borders only if it can be shown that it has not fulfilled its obligations under the TRIPs agreement.

There are two types of enforcement obligations: those on procedures and those on outcomes. The former include judicial, administrative, and criminal procedures, and related remedies that must be available under national law, (both internally and at the border) to right holders in order to prevent infringing activity and to obtain redress in the event that such activity is taking place. These procedures and remedies are too technical to merit an elaborate discussion here. In any event, the more interesting and difficult issue concerns the implied obligations on outcomes. Article 41.1 of the TRIPs agreement specifies that enforcement must be expeditious, while Article 41.5 states that the TRIPs agreement "does not create any obligation to put in place a judicial system for the enforcement of IP

rights distinct from that for the enforcement of law in general, nor does it affect the capacity of Members to enforce their law in general." A key question that arises is whether the standards of performance required of national courts and customs are absolute or relative. The TRIPs agreement does not provide a clear answer—part of the constructive ambiguity that allows important international agreements to be negotiated.

If, on average, it takes 10 years for an IP case to move through national courts say, in Egypt, would that constitute inexpedient and therefore ineffective enforcement for which Egypt could be prosecuted in the WTO by its trading partners? Would Egypt's case be weakened by the fact that the equivalent figure is 2 years in the United States and the EU? Or could it invoke the fact that as a developing country, with limited administrative resources and capabilities, it cannot be held to the same standards as Article 41.1 appears to support? It was understood in the negotiations that, if such an issue came up before a WTO panel, it would be reasonable to expect it to take into account the objective constraints facing a country in deciding whether it had met the obligations to provide effective and expeditious means of enforcement. However, if a panel interpreted the TRIPs provisions as implicitly mandating absolute standards of performance, countries would simply have to devote extra administrative and financial resources to fulfil international requirements. A consequence could be a disparity in a country's domestic legal system because IP cases would be processed faster, owing to international obligations, than cases in other areas. Why should IP be so privileged? Would such precedence be consistent with national priorities for the judicial system? These are uncharted waters as far as the WTO goes, and a further clarification of the real commitments entailed by the TRIPs enforcement might have to await future deliberations in the WTO.

For Egypt, the provisions on enforcement have raised some concern in the light of the lack of administrative and financial resources available to judicial and customs authorities.

(i) Dispute settlement and prevention: The new strengthened WTO dispute settlement procedures that have emerged from the Uruguay Round apply to the TRIPs agreement. These procedures will be faster because of strict time limits, and will provide for greater automaticity in the adoption of panel recommendations and their implementation because parties to a dispute can no longer block adoption. There is also provision for cross-retaliation, subject to certain conditions and multilateral authorization. Crucially, the TRIPs agreement and the WTO dispute settlement procedures would constrain the future use of unilateral measures. When members seek redress of a violation of a TRIPs or Uruguay Round obligation, or of any impediment to the attainment of the objective of the TRIPs agreement, they must have recourse to and abide by multilateral dispute settlement procedures. Any ruling or determination to retaliate must be made in accordance with those procedures. Thus, the commitment to eschew Section 301-type unilateral actions would appear to be broad as it potentially encompasses not only the TRIPs provisions themselves, but also matters related to the objectives of TRIPs.

(j) Transitional arrangements: Egypt like all developing and least-developed countries will have to implement the national treatment and MFN provisions beginning January 1, 1996. Other provisions of the agreement, including those on enforcement, introduction of plant variety protection, and protection for biotechnological processes, will have to be implemented by January 1, 2000 in the case of Egypt (and developing countries generally) and 2006 in the case of least-developed Asian countries. Patent protection for biotechnological products will have to be implemented by 2005.

2. The Egyptian situation in a key sector: pharmaceutical and chemicals

One of the most significant areas of impact of the TRIPs agreement will be the pharmaceuticals sector. Research shows that proprietary rights in the form of patent protection are most important in the case of pharmaceuticals in ensuring that the returns from R&D are appropriated by the inventor because of the relative ease of copying (Levin et al. 1987; Mansfield, 1986, 1994). In other sectors there are natural factors such as lead time, secrecy, increasing returns to scale, and marketing that can help prevent imitation by competitors. In the case of pharmaceuticals, legal protection is a key factor in ensuring that competitors do not dilute the competitive edge of the firms that have undertaken the R&D by cheaply or costlessly imitating the invention.

The size of the Egyptian pharmaceutical market was some US\$ 670 million in 1993, of which a substantial proportion is supplied by foreign companies. Based on evidence for other countries (See Subramanian 1995a, 1995b), the effects of the TRIPs agreement on Egypt are extremely sensitive to the assumptions made about the various market parameters. Two parameters are of particular importance. The first is the proportion of drugs that will be patented in the future, something that is very difficult to predict. According to data presented by the pharmaceutical industry (Gadbaw and Richards 1988), almost 60 percent of current sales of drugs in developing countries would have been patentable had these countries granted patent protection. If this is so, the effect of TRIPs will be large. The second factor is the degree of competition on markets. In the limiting case where the pre-patent situation is perfectly competitive and the post-TRIPs regime is a perfect monopoly, the impact of TRIPs will be quite significant. If, on the other hand, the pre-patent situation is a duopoly with one foreign and one domestic producer, and the post-TRIPs regime is a monopoly with one foreign producer, the impacts become less adverse.^{1/} Such calculations ignore potentially important dynamic benefits stemming from TRIPs-induced R&D effects. While the evidence on such effects is limited, a number of studies have shown that IP protection is important in R&D decisions in the pharmaceutical and chemical sectors, but less so in other sectors (Levin et al. 1987; Mansfield 1986, 1994). In the future, as developing countries come to account for a larger share of global sales, this may induce welfare-enhancing R&D effects.

3. Policy Issues

The policies adopted by countries in the aftermath of TRIPs should be guided by their assessment of the likely net benefits and costs. If the assessment is negative or mixed, countries can consider the policy options outlined below, aimed at mitigating any adverse impacts. However, such options would not be appropriate if the assessment were positive. When a country has expectations of sizable dynamic gains, any attempt at minimizing adverse impacts could in fact reduce the chances of any real gains. This is because the policies designed to minimize adverse effects are also likely to reduce profits, and hence the incentives for R&D and the transfer of technology.

^{1/} This is the model analyzed in Chin and Grossman 1988. Allowing, more realistically, for competition between patented therapeutic classes and government use of compulsory licensing to regulate a post-TRIPs pharmaceutical market, the adverse effects shrink further in magnitude. If, e.g., the situation is assumed to be a Bertrand duopoly in the pre- and post-patent situations, with one domestic and one foreign producer, and the effect of the TRIPs agreement is modelled as forcing an increase in the cost of the domestic producer (due to royalty payments to pay to the foreign patent holder), annual welfare losses of US\$ 220 million and price increases in the order of only 2 percent to 3 percent obtain for a country such as India (Subramanian, 1995a). Maskus and Eby-Konan (1994) calculate the possible economic impacts under other scenarios.

There are some areas, notably in relation to pharmaceuticals, where opinion can be genuinely divided on the merits of higher IP protection. However, any impact of the TRIPs agreement will be felt fully only in 2015–20 years after the implementation of the agreement—which should provide sufficient time for adjustment. But even in these areas, the TRIPs agreement does not foreclose the entire range of policy options that can be deployed by countries to mitigate its possible adverse impacts. First, while the TRIPs agreement has significantly limited the use of compulsory licensing (which was, for example, the preferred tool in Canada for regulating drug prices), countries retain some discretion in using this form of regulatory control. Thus, two of the stringent conditions attached to compulsory licensing—the need to demonstrate that the patent owner has refused to make available a voluntary license on reasonable commercial terms and conditions, and the criterion of adequate compensation—can be waived if it can be shown that an IPR holder's actions have resulted in an anti-competitive practice. Hence, developing countries can, in their national competition laws, specify standards of abuse, encompassing such outcomes as high prices. Further, countries retain enough latitude in determining where these standards could be set, for example, the point at which a price would constitute an abuse of the patent right. In the event that these standards are flouted, compulsory licensing could be used to redress the abuse and bring prices down to reasonable levels.^{1/}

Second, despite intensive efforts, *demandeur* countries were unable to obtain agreement on a prohibition on exhaustion. At stake in this issue was whether right holders could prevent parallel imports and sustain discriminating prices between markets. In other words, the prohibition of exhaustion would have permitted the patent holder to behave like a discriminating monopolist. The absence of such a prohibition means that, at least in larger developing country markets, governments retain the possibility of allowing parallel imports that would exert incipient pressure on prices and prevent them from reaching levels that a discriminating monopolist would have been able to maintain.

4. Trade-Related Investment Measures (TRIMs)

TRIMs refer to a set of measures employed usually, but not exclusively, by developing countries, with a view to compelling or inducing foreign enterprises to meet certain yardsticks of performance. Surveys have revealed that TRIMs tend to be concentrated in specific industries—automotive, chemical and petrochemical, computer and informatics. Local content requirements (LCRs) are more frequent than export performance requirements (EPRs) in the automotive than in computer/informatics industries. In chemicals and petrochemicals both LCRs and EPRs are prominent (Low and Subramanian, 1995).

The Uruguay Round agreement essentially reaffirms existing GATT disciplines relating to national treatment (Article III) and the prohibition of quantitative restrictions (Article XI). An illustrative list identifies two TRIMs—local content and trade balancing requirements—as being inconsistent with Article III, and three TRIMs—trade and foreign exchange balancing restrictions and domestic sales requirements—as constituting QRs. The agreement requires the notification of WTO-inconsistent TRIMs within ninety days of the WTO's entry into force. A timetable for phasing out these TRIMs is also specified. Industrial, developing, and the least developed countries are required to phase out the GATT-inconsistent TRIMs in two, five, and seven years, respectively. Transition periods can be extended for developing and least developed countries if they face difficulties in eliminating TRIMs. A standstill clause requires that existing TRIMs are not intensified during the transition period. A special provision permits the imposition of TRIMs on new enterprises during the

^{1/} That the use of such compulsory licensing by governments can reduce the adverse impacts was noted above.

transition period if that is deemed necessary in order not to disadvantage established enterprises already subject to TRIMs. A TRIMs committee has been established to monitor the implementation of the Agreement.

Egypt eliminated certain requirements in 1994 under the Bank- and Fund-supported adjustment program. However, it appears that certain assembly industries must still meet a local content requirement of up to 60 percent in order to obtain customs duty reductions. This requirement will have to be eliminated as a result of the Round. It can also be noted that the five-year transition period will only be available if existing TRIMs are notified in a timely manner to the WTO.

A serious failure of the TRIMs agreement is that it does not address export performance requirements. Larger developing countries such as India resisted attempts to prohibit EPRs because of their continuing desire to extract export performance from foreign enterprises in return for the carrot of entry into their large, protected markets. Smaller, more open developing countries, cognizant of this ability of large countries to divert investment away from them, were correspondingly more willing to eliminate EPRs. From the viewpoint of the WTO legal system, the disparate treatment of export performance requirements, which are permitted, and their close cousins--export subsidies--which are prohibited (in manufacturing), is an unjustifiable anomaly. In a larger sense, the TRIMs agreement failed to address more important investment issues such as rights of establishment, national treatment, investment incentives, investor protection, etc.--the so-called pure investment issues. There is a strong case for negotiating multilateral rules on investment (see Low 1994), which would benefit countries such as Egypt in a number of ways. First, participation in an international agreement and binding its liberal investment rules would send a strong signal about Egypt's commitment to structural reform. The second relates to the incentive side of investment regimes. While it may be true that TRIMs are falling increasingly into disuse as governments seek to attract investment, it is likely also to follow that governments will be more tempted to compete with each other in the incentives they offer investors. Governments may feel forced to participate in this costly and distorting game, even if basic macroeconomic policies are sound and the political climate is conducive to investment. As with subsidies in trade, investment incentives tend to distort the allocation of FDI, without necessarily augmenting the total supply of investment, or doing so in an economically efficient manner. The possibility of controlling this kind of destructive competition among countries' Finance Ministries is perhaps one of the strongest arguments for international investment rules.^{1/} Developing countries such as Egypt will always be at a disadvantage if the relative attractiveness of fiscal incentive packages in different countries determines investment location decisions.

5. Services

Egypt has a high level of specialization in services trade. Tourism, labor income (associated with temporary labor movement) and transport (fees of the Suez Channel) are large foreign exchange earners. Commercial service (non-factor) exports stood at LE 8,082 million in 1994, as compared to LE 3,854 million for exports of merchandise. Indeed, the large merchandise trade deficit (LE -5,150 million) is too a large extent offset by the surplus in non-factor services. However, most of the non-factor services receipts are accounted for by the Suez canal and tourism. Many Egyptian service industries are inefficient, with monopoly or oligopoly market structures being the norm. A lack of

^{1/} Multilateral rules that curb the use of incentives to attract investment would avoid a potential negative externality and the attendant welfare loss at the international level.

competition confronts users of services (agriculture, manufacturing, consumers) with higher costs. In such cases allowing and encouraging greater inward establishment of foreign service providers, as well as greater imports of services through temporary movement of providers/demanders or telecommunications networks, could do much to give Egyptian industry access to lower cost and higher quality service inputs. The objective of the General Agreement on Trade in Services (GATS) is to encourage the opening of service markets to foreign competition.

1. The GATS in a Nutshell ^{1/}

The GATS consists of three main elements: (i) a set of *general* concepts, principles and rules that apply to all measures affecting trade in services; (ii) *specific* commitments on national treatment and market access; and (iii) a set of attachments, including sectoral annexes. The Agreement applies to four 'modes of supply': (i) cross-border supply of a service (i.e., not requiring the physical movement of supplier or consumer); (ii) provision involving movement of the consumer to the country of the supplier; (iii) services sold in the territory of a Member by (legal) entities that have established a commercial presence there but originate in the territory of another Member; and (iv) provision of services requiring the *temporary* movement of *natural* persons. The Agreement does not apply to services supplied in the exercise of governmental functions.

The reach of MFN and national treatment is less all-encompassing in the GATS than under the GATT. MFN applies to all measures except those explicitly exempted by a Member.^{2/} National treatment applies only to sectors listed in a country's schedule and its reach may be qualified. The GATS also introduces a commitment not found in the GATT: a market access obligation. Six types of *market access restrictions* are in principle prohibited. These consist of limitations on: (i) the number of service suppliers allowed, (ii) the value of transactions or assets, (iii) the total quantity of service output, (iv) the number of natural persons that may be employed, (v) the type of legal entity through which a service supplier is permitted to supply a service (e.g., branches vs. subsidiaries for banking), and (vi) participation of foreign capital in terms of a maximum percentage limit of foreign share holding or the absolute value of foreign investment. The introduction of a market access commitment reflects one of the distinguishing characteristics of service markets: the fact that their contestability is frequently restricted by non-discriminatory measures. Because national treatment and market access are not general obligations in the GATS context, the schedules of commitments of Members are very important in determining the reach of the Agreement.

Other obligations address issues such as transparency, recognition of licenses and certification, payments and transfers, domestic regulation and the behavior of public monopolies. Article III (Transparency) requires all Members to establish inquiry points to provide specific information concerning any laws, regulations, and administrative practices respecting services covered by the Agreement. Article VI (Domestic Regulation) requires that Members establish disciplines to ensure that qualification requirements, technical standards and licensing procedures are based on objective and transparent criteria, are no more burdensome than necessary to ensure the quality of the services

^{1/} This section and the next draw heavily on Hoekman (1995b).

^{2/} MFN exemptions may only be made upon the entry into force of the agreement. Once a Member, further exemptions can only be sought by requesting the Ministerial Conference of the WTO for a waiver (which must be approved by three quarters of the Members). MFN exemptions are in principle to last no longer than ten years and are subject to negotiation in future trade liberalizing rounds, the first of which must take place within 5 years of the entry into force of the agreement.

concerned, and do not constitute a restriction on supply in themselves (thereby possibly circumventing a specific commitment). Article XI (Transfers and Payments) requires Members to refrain from applying restrictions on international transfers and payments for current transactions relating to their specific commitments. Article VII (Recognition) allows for the establishment of procedures for (mutual) recognition of licenses, education, and/or experience granted by a particular Member. It is noteworthy in *requiring* Members to "afford adequate opportunity" for other Members to negotiate their accession to an existing bilateral or plurilateral recognition agreement. Monopoly or oligopoly supply of services is allowed under the GATS, but Governments are required to ensure that such firms do not abuse their market power to 'nullify' any specific commitments relating to activities that fall *outside* the scope of their exclusive rights.

Many of the framework's rules and disciplines apply *only* to the extent specific commitments are made. A good example is Article VI (Domestic Regulation) which requires that "all measures of *general application affecting trade in services* are administered in a reasonable, objective and impartial manner" but only "in sectors where specific commitments are undertaken" (GATT, 1994, p. 333, emphasis added). This is a serious shortcoming. The MFN, national treatment and market access obligations of the GATS do not extend to government procurement of services.^{1/} This greatly reduces the coverage of the GATS as procurement typically represents a significant share of total demand for many services--e.g., professional services, consulting engineering, and construction. The GATS also does not impose general disciplines on subsidy practices, only subjecting subsidies to the Agreement's general obligations (i.e. transparency, MFN and dispute settlement). Negotiations are also called for on this topic, the time frame to be determined by a future work program.

2. The Content of the Specific Commitments

To a very large extent the impact of the GATS depends on the commitments that are made by Members. Negotiators chose to pursue a 'hybrid' of a positive and negative list approach to scheduling specific commitments. It is a positive list with respect to determining sectoral coverage of market access and national treatment commitments; a negative list with regard to the maintenance of measures that violate either national treatment or the market access disciplines. Each Member first decides (negotiates) which service sectors will be subject to the GATS market access and national treatment disciplines. It then decides (negotiates) what measures will be kept in place *for that sector* that violate market access and/or national treatment, respectively. Such limitations and exceptions must be specified for each of the four modes of supply. In addition to the specific commitments, countries also make 'horizontal' commitments. These usually consist of a compilation of laws and policies that restrict the use of a mode of supply by foreign suppliers, independent of the sector involved. A policy that is often scheduled is an 'economic needs' test--regulations stipulating that foreign service providers may contest a market only if domestic providers do not exist, or are unable to satisfy demand.

^{1/} Negotiations on this issue are to be initiated within two years of the entry into force of the WTO. The revised GATT Government Procurement Agreement was expanded to include services. However, this is a plurilateral agreement that binds only signatories. There were 13 members, mostly OECD countries, at the beginning of the Round (counting the EU as one). Egypt is not a signatory. See Hoekman and Mavroidis (1995) for a discussion.

To assess the schedules, sectoral commitments of GATS Members were scaled by Hoekman (1995) with a view to 'quantifying' two things: (1) the extent to which measures have been *bound*; and (2) the share of sectors where the binding relates to 'free trade' (defined as the absence of market access restrictions or limitations on national treatment). Each GATS Member's specific commitments was entered into a spreadsheet (commitments made as of April 1994 were considered in this exercise). Two country groups were created for comparison purposes, one for 79 'developing countries', and one for 18 high income countries ('HIC'). The 'developing country' group includes countries with a wide range of per capita incomes and substantial variation in service market size (GDP). Because of their relatively low per capita incomes this group includes a number of East European transition economies--the Czech Republic, Hungary, Poland, Romania, and the Slovak Republic. Among the Arab countries, the following had submitted offers by April 1994: Algeria, Bahrain, Egypt, Kuwait, Morocco and Tunisia. It is worth noting that currently there are accession working parties to the GATT and/or the WTO for Algeria, Jordan, Saudi Arabia and Sudan.^{1/}

Commitments were classified into three categories: (1) 'None', implying no restrictions are applied on *either* market access or national treatment for a given mode of supply/sector; (2) 'Unbound', meaning no policies are bound for a given mode of supply/sector; and (3) 'Other', which in practice implies that a sector is scheduled but that restrictions are listed. To allow calculation of the sectoral coverage of commitments, one of three numerical indicators (weights) was allocated to each of the 'cells' of a Member's schedule: a '1' in all instances where 'None' was stated in the schedule for a sector/mode of supply (i.e., full market access/national treatment is provided); a zero in all instances where Member's list 'Unbound' for a sector/mode of supply; and 0.5 in all instances where specific restrictions or limitations are listed for a sector/mode of supply. The value of these indicators were chosen so as to allow aggregation across sectors and countries. The higher the number, the greater the implied extent of openness-cum-binding.^{2/} Scaling commitments of 'unbound' as zero, and commitments where measures violating national treatment or market access were listed as 0.5 reflects a perception that scheduling and binding has value, no matter how restrictive the policies that are maintained. The value of 0.5 is arbitrary, and serves simply to distinguish commitments from the other two categories.

Market access (MA) and national treatment (NT) coverage ratios are reported in Table 6. Three indicators were calculated. First, the number of sector/mode of supply combinations (cells) where a commitment was made. Second, the 'average coverage' of the schedule defined as the arithmetic mean of the scale factors allocated to each cell (0 for 'unbound', 0.5 for bound restrictions, and 1 for 'no restrictions'). Third, the share of 'no restriction' commitments in (1) a Members total commitments ('count'); and (2) relative to the 155 possible sectors of the GATS classification list. The higher the number, the more 'liberal' the country.

'HIC' members made commitments of some kind for 47.3 percent of the GATS list, as compared to 11.2-19.7 percent for developing country groups, depending on their per capita income level. Commitments made by large developing countries, arbitrarily defined as those with GDP of US \$40 billion or more, were substantially higher than the developing country average, accounting for 38.6

^{1/} Qatar and the United Arab Emirates submitted schedules in 1995 and are not included in the analysis.

^{2/} A value of 1 for a sector/mode of supply does *not* necessarily imply that foreign service providers can freely contest a specific market through a given mode of supply. This depends on the applicable horizontal commitments. In all cases where a reference is made under the temporary entry mode of supply to a horizontal commitment (restriction), a value of 0.5 was entered.

percent of the GATS list. The average coverage of MA commitments for the 'HIC' group is 35.9 per cent; that for developing country groups varies between 6.7 and 13.3 percent; and that for large developing countries is 22.9 percent. If these figures are related to the simple 'count' of the number of sectors where commitments were made, it can be observed that 'HIC' countries tend to be more liberal. That is, the proportion of commitments implying either a '1' (no restriction) or a 0.5 (some restriction, but bound) is higher than for developing countries. In Table 6 this can be seen in the third row, which divides the average 'coverage' of commitments by the 'count'. This ratio for the large developing country group is some 15 percentage points lower than for the 'HIC' group. Some 57 percent of the 'HIC' group's commitments imply 'no restrictions', as compared to 36.7 percent for the group of large developing countries. Table 6 also reports the importance of 'no restriction' commitments relative to the GATS list (i.e., the maximum possible). Such commitments by 'HIC' members account for 27.1 percent of the total. For developing countries as a whole the figure ranges from 4.7 to 9.8 percent; for the large developing country group it is 14.9 percent.

Identical ratios were calculated for NT commitments. A comparison of commitments on NT and MA reveals that most countries tend to be more liberal with regard to national treatment. The last row of Table 6 reports the magnitude of commitments where 'no restriction' applies to *both* MA and NT for a given sector/mode of supply. The figure for 'HIC' is 25 percent, and that for the other country groups ranges from 4.4 to 9.5 percent. These numbers vividly illustrate how far away GATS members are from attaining 'free trade' in services, and the magnitude of the task that remains.

A breakdown of specific commitments across regions is reported in Table 7. It can be seen that the Middle East and North Africa made greater commitments than Africa or South Asia, and does not compare very badly with East Asia. However, relative to Eastern European and Central Asian countries, commitments were almost 3 times lower. With respect to the Arab countries, the offers of Algeria, Bahrain and Tunisia were more limited than the average offer of developing countries as a group. Egypt, as well as Kuwait and Morocco, made commitments that can be characterized as somewhat more comprehensive than the average developing country (Table 8). There is a fair amount of variance as regards the sectoral coverage of the commitments (Table 9). The fewest commitments by HIC country groups were made in sectors such as land, water and air transport, postal services, basic telecoms, R&D, education, health, social, and recreation and social services. Of these 'sensitive' sectors, developing countries have a potential export interest in the last three, insofar as most 'personal' services are included in these categories (none of which were scheduled). But the coverage of business services, computer-related services, and construction is quite high. These sectors cover many activities where developing countries have an export potential. The commitments of developing countries, in turn, are only substantial in the area of hotel and restaurant services (that is tourism-related services). The Arab countries covered in Table 8 also follow this pattern, although it is worth noting that in construction and financial services these countries as a group scheduled a higher than average (as compared to the developing country group) number of service activities.

3. Implications of the GATS for Egypt

In evaluating the impact of the GATS, one can focus on the following types of effects: (1) the role of the GATS as an "anchor" for domestic policies; (2) the GATS as a mechanism to foster access to efficient services by the domestic economy; and (3) the benefits of services liberalization for domestic service exporters. Effects (1) and (2) are basically determined by the coverage and degree of liberalization of the offers made by Egypt itself. The third effect, although influenced by the country's commitments, reflects the overall impact of the GATS agreement in reducing foreign market access barriers. The "anchor" effect is a conventional by-product of participation in a multilateral

agreement. By binding its policies in the GATS, a government will be in a better position to resist demands from influential interest groups to alter these policies in the future. The GATS imposes costs on "backsliding"--i.e., adopting more restrictive policies for services that are bound--by requiring countries to negotiate the withdrawal of specific commitments. In this context, even an offer to bind the status quo has a value to the extent that it improves the transparency of the regulatory regime and makes "backsliding" less likely.

Most of the potential gains associated with GATS membership will result from liberalizing access to domestic service markets. There is substantial evidence that many of the constraints that reduce the economic efficiency of service industries in developing countries are "home grown," in that appropriate policies are not pursued (UNCTAD and World Bank 1994). Producer services (services that support other business activities), in particular, play a crucial role in the development prospects of any nation. Losses of agricultural output due to poor transportation and the impact of substandard communication networks on the costs of doing business are familiar examples in this context. The evidence available for Egypt suggests that services are higher cost and lower quality than those available to industries and consumers located in comparator countries (World Bank, 1995).

Efficient producer services are also fundamental for the pursuit of an outward-oriented strategy of development. In the case of manufacturing, for example, access to global networks in communication and transportation is becoming a necessary condition for international competitiveness. Products are becoming increasingly time sensitive, both because of shorter product life-cycles and because of the pervasive use of 'just-in-time' production management techniques. Foreign buyers must be assured that a supplier can deliver to specification and on time. The latter requirement in particular may be difficult to meet if producer services are of low quality or high cost. Inefficient port and handling services, or high cost insurance--both due in part to a lack of competition--are examples of services that may impede export development. Services liberalization provides an effective way to promote efficiency in producer services (Hoekman, 1995a).

The magnitude of the commitments made in the GATS by Egypt suggests that the Government was not attracted by these benefits. Overall, the immediate implications of the GATS agreement for domestic service providers are quite limited. Egypt--the Arab country with the highest level of "no restrictions" applied on market access and national treatment (see Table 8)--made commitments for less than 20 percent of the service sector. These commitments mostly consist of binding the status quo of protection for the sectors scheduled. The qualifications that are maintained are significant and include limitations on the share of foreign personnel in foreign controlled enterprises (and even in the overall wage bill in the case of maritime transport), a maximum of 49 percent of foreign capital in several industries (construction and related engineering services, tourism projects in the Sinai region, insurance), economic needs tests in the case of tourism, opening of branches by foreign banks and insurance (e.g., new companies should be able to work without "harmful" competition to existing companies), restrictions on the operations of representative offices, etc. In part the limited nature of the commitments may reflect the fact that many of the services in which Egypt is likely to have or develop a comparative advantage require movement of labor. To the extent that this mode of supply was basically kept off the table by developed countries, the "mercantilistic" bargain typical of multilateral negotiations--with export-oriented industries supporting domestic liberalization in exchange for better market access abroad--was weakened in the case of services. But such mercantilist arithmetic is ill conceived, as non-liberalization is very costly to the domestic economy.

More needs to be done to open up the service sector to greater competition, thereby granting Egyptian industry access to higher quality and lower cost service inputs. The average nominal

(unweighted) tariff in Egypt is currently around 30 percent. The import-weighted average--which provides a much more accurate view of nominal protection--is virtually identical (26 percent for goods of EU origin; 29 percent for the rest of the world) (Table 10). The average effective rate of protection--taking into account how the structure of protection affects value added produced in manufacturing--is also some 30 percent, with some industries having effective rates that are higher than nominal ones, and vice versa. However, if account is taken of the fact that service inputs used by Egyptian industry are less efficient and more costly than they might be (because of lack of competition), the magnitude of effective protection declines substantially for all industries. Indeed, for a number of them it becomes negative, implying that tariffs on imported intermediate inputs combined with the implicit tariffs on service inputs outweigh the tariff protection on the goods produced. That is, the regulatory regime results in the effective taxation of Egyptian industry. This is the case for 8 industries, mostly agricultural processing and natural resource-based activities (oil/gas and other extractive activities) (Table 10). As a result, the manufacturing average effective rate of protection falls to 14 percent. This illustrates the importance of taking into account service policies.

6. Beyond the WTO: Alternative Routes Towards Further Liberalization

There are a variety of options for the Government to liberalize trade and investment regimes further, including unilateral action, multilateral (WTO-based) liberalization based on reciprocity, and preferential or regional approaches. For a small country such as Egypt that cannot influence its terms of trade for most commodities, unilateral liberalization is welfare superior to the other options. If, in the context of multilateral negotiations, other countries reciprocate, this will increase the gains from unilateral liberalization efforts. However, given the small country assumption, there are few if any gains to be expected from making liberalization conditional upon reciprocity by trading partners. In principle, preferential liberalization through the negotiation of a FTA will also be an inferior strategy. The reason is simple: the world market is always larger than a regional one. By not discriminating across potential trading partners, domestic firms and consumers will be allowed to buy goods and services from least cost suppliers, wherever they are located. By discriminating in favor of specific countries, the possibility arises of trade *diversion*--the elimination of tariffs for partner countries may induce consumers and firms to source from less efficient suppliers located in a partner country, rather than from the least cost source of supply. It may be the case that trade *creation*--the elimination of domestic sourcing by firms and consumers in favor of imports of goods produced by more efficient suppliers in the partner country after the elimination of trade barriers--is sufficient to offset the welfare loss caused by trade diversion. The point, however, is that through unilateral liberalization such losses do not occur, and the net gains are greater.

Egypt has been pursuing a gradual, unilateral liberalization strategy. Much of what was done unilaterally in the past decade has been locked in through the WTO. Implementation of the many WTO agreements on matters such as product standards and customs valuation--not discussed in this paper (see Hoekman, 1995a)--will ensure that the trade regime becomes more transparent. Much remains to be done, however. Despite the general economic arguments against preferential trade liberalization,^{1/} the Government is in the process of negotiating a EMA with the EU. Abstracting from the important

^{1/} A distinctive feature in the EMA context is that Mediterranean countries already have duty-free access to the EU for industrial products. The loss in tariff revenue associated with a shift to free trade with the EU is therefore asymmetric (Panagariya, 1995).

foreign policy dimension underlying such an agreement, there are a number of possible reasons why active pursuit of an EMA may make sense. Five will be mentioned briefly.^{1/}

1. Credibility and dynamic gains An EMA may offer a stronger mechanism for locking in (anchoring) economic reforms than the WTO because it addresses policy areas that are not covered by the WTO at all, or where WTO disciplines are weak. For example, investment or factor market policies are not addressed by the WTO. Nor is competition (antitrust) policy. WTO disciplines pertaining to services policies are relatively weak (see above). The greater credibility that may be associated with a RIA, can lead to higher dynamic growth effects insofar as more investment is fostered, greater adjustment efforts are made, etc.

2. Harmonization An important element of an EMA may consist of harmonizing regulatory regimes and administrative requirements relating to product standards, testing and certification procedures, mutual recognition agreements, common documents for customs clearance (e.g., the EU's Single Administrative Document), coordination and cooperation on linking computer systems of Customs, etc. These are areas where the WTO is restricted to general principles (i.e., national treatment and MFN). While such cooperative efforts can be pursued unilaterally, formal agreements may be necessary to induce the administrative bodies involved to cooperate.

3. Security of market access A benefit of an EMA may be that it allows the countries involved to agree to eliminate the possibility of imposing contingent protection, such as antidumping actions. To the extent that a substantial share of total trade is with partner countries, such agreement could be of great value. In the multilateral context such an agreement is unlikely to be feasible in the near future. Harmonization of administrative requirements and procedures may also help to improve the security of market access. An important area in this connection relates to product standards and their enforcement.

4. Transfers Another potential benefit of an EMA is that it may be associated with transfers. Such transfers may be financial, or take the form of technical assistance. To the extent that such transfers are conditional upon membership of the RIA (i.e., are *additional*), they will help offset the possible losses associated with the implicit transfer of tariff revenue to the EU due to elimination of tariffs and the costs of trade diversion more generally. Additionality is important, and much may depend on how this is measured. For example, Egypt already receives significant financial assistance from the EU, both through bilateral official aid, and through the Financial Protocols that are negotiated every 4 years under auspices of the Cooperation Agreements. What matters in this connection is the comparison between the present discounted value of the expected transfers under status quo arrangements (Cooperation Agreements) and those that are expected under the new regime (the EMA). Given the generally declining trend in official aid, and the emergence of Eastern European "claimants," taking past transfers as the basis for an "additionality" test is probably unrealistic.

5. Political economy Because of political considerations, in this case the foreign policy objectives of moving closer to Europe, there may be a stronger political constituency for regional liberalization than for MFN liberalization. Hence, the chances of attaining liberalization, albeit on a preferential basis, may be greater than for MFN liberalization.

^{1/} See Hoekman and Djankov (1995) for a more comprehensive discussion.

While these are all potentially powerful rationales for pursuing an EMA, much depends on the contents of the agreement. In particular, comprehensive liberalization of service markets and investment must be pursued. Without this, the opportunity costs of preferential liberalization may well be large. The best guarantee for an EMA to be welfare improving is if it is used as part of a deliberate strategy to liberalize the economy more generally, i.e., on a most-favored-nation (MFN) basis. The possible loss associated with a EMA will be reduced if efforts are made to reduce trade barriers confronting non-partner countries. Adjustment costs associated with liberalization on an MFN basis are not likely to be much higher than those emerging from regional liberalization with the EU. The offer of financial and other assistance from the EU can then be used to facilitate the transition path to MFN reductions in trade barriers. Stated otherwise, the EMA may allow a government to enhance the political feasibility of MFN liberalization. Very much depends in this connection on the willingness of the government to state clearly that general, MFN liberalization of the trade regime is indeed its objective. If this is not done, incentives may easily be created for the formation of coalitions between EU and domestic firms that oppose further opening of the market to (more efficient) third country suppliers.

It is in this connection that Egypt's WTO membership and the results of the Uruguay Round are of great importance. Commitments made in the Uruguay Round will not only help to move the regulatory environment in Egypt closer to what is envisaged by the EMA and thus facilitate its negotiation/implementation. More important is that the WTO offers a mechanism to reduce and bind the level of protection on an MFN basis. The EMA can be a very useful instrument to help plug some of the holes in the WTO, and in the process facilitate Egypt's participation in the discussions to further expand its commitments under the WTO. The importance of the latter cannot be overstated.

7. Conclusion

The Uruguay Round will generally have a very limited impact on the policies of Egypt in the areas of goods, investment, and services. The impact will be more significant in the area of intellectual property, but even here the impact will be backloaded. Insofar as this reflects a defensive attitude toward liberalization that will be maintained, this does not bode well for an economy that will be facing growing competitive pressures as the world economy becomes more integrated. However, the recent initiatives as regards moving towards free trade with the EU suggests that this is not the case. The task ahead is to better explore the opportunities opened by the Uruguay Round in order to further more liberal trade policies. The EMA discussions provide a valuable opportunity to expand such liberalization, but these in turn should provide a foundation for more general MFN-based reform.

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Table 1: Egypt: Indicators of Import Liberalization under the Uruguay Round

A. BINDINGS			
Total Number of HS 4-digit Tariff Lines, December, 1994			1267
Agriculture			221
Industry			1046
Total number of HS 4-digit Tariff Lines Bound			1236
Agriculture			221
Industry			1015
Percent of HS 4-digit Tariff Lines Bound			97.6%
Agriculture			100.0%
Industry			97.1%
B. TARIFF REDUCTIONS			
	<u>Agriculture</u>	<u>Industry</u>	<u>Total</u>
Average Final Bound Rate in 2005	61.7%	32.1%	37.0%
Average Applied Rate, December 1984	56.4%	27.1%	32.0%
Average Expected Applied Rate, December 1995 ^{1/}	50.3%	21.2%	26.1%
Average "Water in the Bound Tariff", December 1995 ^{2/}	5.3%	5.0%	5.0%
Average Expected "Water in the Bound Tariff", December 1995 ^{2/}	11.4%	10.9%	10.9%
Number of Tariff lines Affected by the Uruguay Round ("Affected Imports") ^{3/}	36	192	228
as percent of total tariff lines	8.9%	10.1%	9.9%
Average Tariff Reduction on "Affected Imports" ^{2/ 3/}	-9.4%	-11.3%	-11.0%
Average Price Reduction on "Affected Imports" ^{3/ 4/}	-4.8%	-6.7%	-6.4%

^{1/} If the current program of reform is fully implemented.

^{2/} Percentage points.

^{3/} This measures the additional liberalization that will need to be undertaken after the current reform program, and excludes the textiles and clothing sector. Thus, for these tariff lines, Uruguay Round bound rates in 2005 will be less than what applied rates will be in December 1994 and 1995.

^{4/} Based on adjustments that reflect the relations between actual duty collections and statutory tariff in Egypt. Specifically, the usual expression for the percentage change in domestic price, $dt/(1+t)$, was multiplied by the 2/3, where t represents the statutory ad valorem tariff rate.

Table 2: Egypt: Impact of Uruguay Round on Foods Imports (US \$ million)

	1993/94	1998/99	2001/02
<u>Baseline: With Uruguay Round ^{1/}</u>			
Wheat	342.3	380.9	411.1
Flour	82.3	88.6	93.8
Maize	247.6	286.1	313.0
Edible Oil	275.3	281.1	313.2
Sugar	149.8	186.6	209.1
Tea	97.4	129.3	148.9
Animal Fats	59.6	60.3	67.1
Total	1254.3	1412.8	1556.1
<u>Scenario I: Without Uruguay Round ^{2/}</u>			
Wheat	342.3	378.6	406.3
Flour	82.3	88.1	92.7
Maize	247.6	284.4	309.3
Edible Oil	275.3	281.9	315.0
Sugar	149.8	185.7	209.1
Tea	97.4	130.3	151.1
Animal Fats	59.6	60.4	67.5
Total	1254.3	1409.5	1551.0
<u>Incremental effect of the Round</u> as percent of baseline imports		3.3 0.2%	5.1 0.3%
<u>Scenario II: Without Uruguay Round ^{3/}</u>			
Wheat	342.3	373.8	395.9
Flour	82.3	87.0	90.3
Maize	247.6	280.8	301.4
Edible Oil	275.3	281.5	314.1
Sugar	149.8	183.2	203.4
Tea	97.4	130.2	150.8
Animal Fats	59.6	60.4	67.3
Total	1254.3	1396.8	1523.3
<u>Incremental Effect of the Round</u> as percent of baseline imports		16.0 1.1%	32.8 2.1%

^{1/} Based on the World Economic Outlook (WEO) projections. Under Scenario I (II), it is implicitly assumed that the WEO projections incorporate the incremental price effects due to the Uruguay Round that are based on the assumption in Scenario I (II) below.

^{2/} Based on estimates of changes in the world food prices estimated by Goldin and van der Mensbrugghe (1995) on the assumption that levels of protection in agriculture in the absence of the Round would have been the average level between 1982 and 1993.

^{3/} Based on estimates of changes in world food prices estimated by Goldin and van der Mensbrugghe (1995) on the assumption that levels of protection in agriculture in the absence of the Round would have been the average level between 1991 and 1993.

Table 3: Egypt: Impact of EU's tariff cuts on Egypt's Non-Oil Exports to EU (in thousands of 1990-92 U.S. dollars unless otherwise specified)

SITC Code, Commodity	Average value, 1990-92 (1)	Harmonized System Code (HS) (2)	Pre-Round Tariffs (percent) (3)	Post-Round Tariffs (percent) (4)	Percentage Change in Price (5)	Type of Trade 1/ (6)	Percentage Change in Export 2/ (7)	Change in Exports (8)	Import Demand Elasticity (9)
651 TEXTILE YARN AND THREAD	17153.3	52	8.44	6.51	-1.8%	Quota	54.9%	95015	-1.14
684 ALUMINUM	156103.0	26	0.00	0.00	0.0%	MFN	0.0%	0	-1.38
841 CLOTHING NOT OF FUR	56943.0	61	13.19	11.66	-1.4%	Quota	54.9%	31247	-3.92
652 COTTON FABRICS, WOVEN	43230.0	5208	10.00	8.00	-1.8%	Quota	54.9%	23727	-1.14
054 VEGETABLES FRESH ETC.	36250.3	07	11.24	8.33	-2.6%	MFN	3.0%	1072	-1.13
656 TEXTILE PRODUCTS, NES	21052.0	59 & 60	9.69	7.10	-2.4%	Quota	54.9%	11552	-3.92
263 COTTON	19179.7	5201.00	0.00	0.00	0.0%	MFN	0.0%	0	-1.14
561 FERTILIZERS, MANUFACTURED	16038.7	31	5.01	4.31	-0.7%	Preferential	-0.5%	-87	-0.81
677 IRON, STEEL WIRE EXCL WIRE ROD	13548.7	72	4.94	0.11	-4.6%	Preferential	-2.1%	-283	-0.45
031 FISH FRESH, SIMPLY PRESERVED	10306.7	03	13.35	11.47	-1.7%	MFN	1.9%	193	-1.13
599 CHEMICALS, NES	10196.3	28 & 29	7.04	4.47	-2.4%	Preferential	-1.9%	-199	-0.81
673 IRON AND STEEL SHAPES	10157.0	72	4.94	0.11	-4.6%	Preferential	-2.1%	-212	-0.45
292 CRUDE VEGETABLE MATERIALS, NES	10100.3	14	0.19	0.00	-0.2%	MFN	0.2%	22	-1.13
055 VEGETABLES PRESERVED, PREPARED	9843.3	07	11.24	8.33	-2.6%	MFN	3.0%	291	-1.13
671 PIG IRON, ETC	8342.7	72	4.94	0.11	-4.6%	Preferential	-2.1%	-174	-0.45
674 IRON, STEEL, PLATE, SHEET	7252.7	72	4.94	0.11	-4.6%	Preferential	-2.1%	-152	-0.45
682 COPPER	6845.3	74	4.62	2.12	-2.4%	Preferential	-1.1%	-72	-0.44
051 FRUIT, FRESH NUTS, FRESH DRY	6712.0	08	11.62	8.66	-2.7%	MFN	3.0%	3201	-1.13
657 WIRE PRODUCTS, NON ELECTRICAL	6356.3	57	10.25	7.66	-2.3%	Quota	54.9%	3488	-3.92
693 WIRE PRODUCTS, NON ELECTRICAL	6355.0	74	4.62	2.12	-2.4%	Preferential	-0.8%	-50	-0.33
061 SUGAR AND HONEY	6343.0	17	14.00	9.98	-3.5%	MFN	4.0%	253	-1.33
678 IRON, STEEL, TUBES, PIPES, ETC	4880.7	73	6.04	0.99	-4.8%	Preferential	-2.2%	-106	-0.45
042 RICE	4775.7	1006.10.00	330.00	211.00	-27.7%	MFN	31.3%	1493	-1.13
081 ANIMAL FEEDING STUFF	4699.3	23	1.97	1.37	-0.6%	MFN	0.7%	31	-1.13
551 ESSENTIAL OIL, PERFUME, ETC	3237.0	33	5.28	2.23	-2.9%	Preferential	-1.9%	-62	-0.66
221 OIL SEEDS, NUTS, KERNELS	3108.0	12	2.52	1.08	-1.4%	MFN	1.6%	49	-1.13
812 PLUMBING, ETC, EQUIP	2801.0	85 & 84	5.09	2.32	-2.6%	Preferential	-3.0%	-85	-1.15
893 ARTICLES OF PLASTIC, NES	2761.0	39	9.44	6.21	-3.0%	Preferential	-2.4%	-66	-0.81
861 INSTRUMENTS, APPARATUS	2424.0	90	5.63	2.08	-3.4%	Preferential	-2.2%	-54	-0.66
Memorandum Items:									
TOTAL EXPORTS	1251307.3								
Total non-oil, non-gas exports	711050								
Total Exports covered in analysis	663006								
of which:									
Preferential Exports	94840								
MFN (non-quota) Exports	267421								
Exports under quota	300745								
Increase in Exports due to:									
Quota Effect	165029								
MFN tariff cut effect	3605								
Preference erosion effect	-1601								
Total	167033								

Sources: Exports in column (1) from United Nations Commodity Trade Statistics. Demand elasticities from Stern and others (1976). Elasticities for preference erosion effects use merchandise imports as proportion of apparent consumption of non-services GDP from World Bank, World Tables and IMF, Direction of Trade Statistics.

Table 4: Egypt: Impact of U.S. tariff cuts on Egypt's non-Oil Exports to U.S.
(thousands of 1990-92 U.S. dollars unless otherwise specified)

SITC Code, Commodity	Average value, 1990-92 (1)	Harmonized System (HS) Code (2)	Pre-Round Tariffs (percent) (4)	Post-Round Tariffs (percent) (5)	Percentage Change in Price (5)	Type of Trade 1/ (6)	Percentage change in Exports 2/ (7)	Change in Exports (8)
641 CLOTHING, NOT FUR	53829	61	15.92	11.19	-4.1%	Quota	54.9%	29538
652 COTTON FABRICS, WOVEN	18880	5208	8.44	6.51	-1.8%	Quota	54.9%	10360
651 TEXTILE YARN AND THREAD	14761	52	10.63	8.57	-1.9%	Quota	54.9%	8100
656 TEXTILE ETC PRODUCTS, NES	4757	59 & 60	10.24	4.93	-4.8%	Quota	54.9%	2611
292 CRUDE VEGETABLE MATERIALS, NES	4524	14	1.66	0.99	-0.7%	MFN	0.7%	34
657 FLOOR COVER, TAPESTRY, ETC	3994	57	6.11	2.80	-3.1%	Quota	54.9%	2192
075 SPICES	2095	09	1.21	0.70	-0.5%	MFN	0.6%	12
671 PIG IRON, ETC	1822	72	5.27	0.24	-4.8%	Preferential	-2.5%	-46
678 IRON, STEEL, TUBES, PIPES, ETC	1493	73	4.08	1.02	-2.9%	Preferential	-1.5%	-23
821 FURNITURE	1048	94	4.83	2.02	-2.7%	Preferential	-3.0%	-31
551 ESSENTIAL OIL, PERFUME, ETC	827	33	2.13	1.12	-1.0%	Preferential	-0.8%	-6
054 VEGETABLES FRESH, ETC	816	07	13.73	9.05	-4.1%	MFN	4.6%	38
553 PERFUME, COSMETICS, ETC	681	34	4.61	1.45	-3.0%	Preferential	-2.3%	-16
Memorandum Items:								
TOTAL EXPORTS	262929							
Total non-oil, non-gas, exports	114609							
Total exports covered in analysis	109527							
of which:								
Preferential Exports	5871							
MFN (non-quota) exports	7435							
Exports under quota	96221							
Increase in exports due to:								
Quota effect	52800							
MFN tariff cut effect	84							
Preference erosion effect	-122							
Total	52761							

Sources: Exports in column (1) from United Nations Commodity Trade Statistics. Demand elasticities from Stern and others (1976). Elasticities for preference erosion effects use merchandise imports as proportion of apparent consumption of non-services GDP from World Bank, World Tables and Economic Report of the President (1995).

1/ MFN = change in trade due to MFN tariff cut by U.S.; preferential = change in trade due to preference erosion; quota = change in trade due to quota liberalization.

2/ For currently quota constrained items, the percentage change in exports represents the difference between the cumulative growth rate that would have prevailed under the MFA and the cumulative growth rate resulting from the Round.

Table 5: Egypt: Impact of Japan's tariff cuts on Egypt's Non-oil Exports to Japan
(thousands of 1990-92 U.S. dollars unless otherwise specified)

SITC Code, Commodity	Average value in 1990-92 (1)	Harmonized System (HS) Code (2)	Pre-Round Tariffs (percent) (3)	Post-Round Tariffs (percent) (4)	Percentage Change in Price (5)	Type of Trade 1/ (6)	Percentage Change in Exports (7)	Change in Exports (8)
263 COTTON	27436	5201.00	0.00	0.00	0.0%	MFN	0.0%	0
671 PIG IRON, ETC	2804	72	5.34	0.26	-4.8%	MFN	6.8%	192
651 TEXTILE YARN AND THREAD	1803	52	6.75	4.56	-2.1%	MFN	2.3%	42
684 ALUMINUM	969	26	0.00	0.00	0.0%	Preferential	0.0%	0
719 MACHINES, NES, NONELECTRIC	810	84	3.64	0.00	-3.5%	Preferential	-0.7%	-6
657 FLOOR COVER, TAPESTRY, ETC	676	57	12.72	7.55	-4.6%	MFN	18.0%	122
677 IRON, STEEL WIRE EXCL. WIRE ROD	673	72	5.34	0.26	-4.8%	Preferential	-1.4%	-9
Memorandum Item:								
TOTAL EXPORTS	65399							
Total non-oil non-gas exports	38118							
Total exports covered in analysis	35171							
of which:								
Preferential exports	2452							
MFN exports	32719							
Exports under quota	0							
Increase in exports due to:								
Quota effect	0							
MFN tariff cut effect	356							
Preference erosion effect	-15							
Total	341							

Sources: Exports in column (1) from United Nations Commodity Trade Statistics. Demand elasticities from Stern and others (1976). Elasticities for preference erosion effects use merchandise imports as proportion of apparent consumption of non-services GDP from World, World Tables.

1/ MFN = change in trade due to MFN tariff cut by Japan; preferential = change in trade due to preference erosion.

Table 6: Sectoral Coverage of Specific Commitments (percent)

	HIC	LMIC	Low Income	Lower Middle Income	Upper Middle Income	Large Developing Nations
Market Access (MA):						
Unweighted average 'count' (sectors-modes listed as a share of maximum possible)	47.3	16.2	11.2	17.4	19.7	38.6
Average coverage (sectors-modes listed as a share of maximum possible, weighted by openness/binding factors)	35.9	10.3	6.7	10.7	13.3	22.9
Coverage/'count' (average coverage as a share of the average count)	75.9	63.6	59.8	61.5	67.2	59.3
'No restrictions' as a share of total offer (unweighted 'count')	57.3	45.5	41.9	43.2	49.6	38.7
'No restrictions' as a share of maximum possible	27.1	7.3	4.7	7.5	9.8	14.9
National Treatment (NT):						
Unweighted average 'count' (sectors-modes listed as a share of maximum possible)	47.3	16.2	11.2	17.4	19.7	38.8
Average coverage (sectors-modes listed as a share of maximum possible, weighted by openness/binding factors)	37.2	11.2	6.8	11.8	14.8	25.5
Coverage/'count' (average coverage as a share of average count)	78.6	69.1	60.7	67.8	75.0	66.1
'No restrictions' as a share of total offer (unweighted 'count')	65.1	58.0	48.8	57.5	62.8	52.3
'No restrictions' as a share of maximum possible	30.8	9.4	5.4	10.0	12.4	20.2
Memo items:						
No restrictions on MA and NT as a share of maximum possible	24.8	6.9	4.4	6.9	9.5	14.3

Table 7: Sectoral Coverage of Developing Country Commitments by Region (percent)

	Africa	East Asia	South Asia	MENA	Eastern Europe/ Central Asia	Americas
Market Access (MA):						
Unweighted average 'count' (sectors-modes listed as a share of maximum possible)	9.0	24.2	10.2	15.6	33.8	15.7
Average coverage (sectors-modes listed as a share of maximum possible, weighted by openness/binding factors)	6.1	14.6	4.1	8.2	24.1	9.8
Coverage/'count' (average coverage as a share of the average count)	67.6	60.6	40.2	52.8	71.4	61.9
'No restrictions' as a share of total offer (unweighted 'count')	50.0	39.5	17.1	37.1	52.4	46.3
'No restrictions' as a share of maximum possible	4.5	9.6	1.7	5.8	17.7	7.3
National Treatment (NT):						
Unweighted average 'count' (sectors-modes listed as a share of maximum possible)	9.0	24.2	10.2	15.6	33.8	15.7
Average coverage (sectors-modes listed as a share of maximum possible, weighted by openness/binding factors)	6.7	15.0	4.5	9.2	23.2	10.1
Coverage/'count' (average coverage as a share of average count)	74.5	62.0	44.6	58.8	68.8	63.9
'No restrictions' as a share of total offer (unweighted 'count')	64.6	50.8	31.3	49.4	70.2	52.8
'No restrictions' as a share of maximum possible	5.8	12.3	3.2	7.7	23.7	8.3
Memo items:						
No restrictions on MA and NT as a share of maximum possible	4.4	8.0	1.7	5.7	17.4	6.8

AM: Argentina, Bolivia, Brazil, Chile, Colombia, Mexico, Paraguay, Peru, Uruguay, Venezuela

ECA: Czech Rep., Hungary, Poland, Romania, Slovak Rep., Turkey

SA: Bangladesh, India, Pakistan, Sri Lanka

EA: China, Indonesia, Malaysia, Philippines, Thailand, Korea

MNA: Algeria, Bahrain, Egypt, Kuwait, Morocco, Tunisia

AFR: Cameroon, Cote d'Ivoire, Gabon, Ghana, Kenya, Nigeria, Senegal, South Africa, Zimbabwe

Table 8: Sectoral Coverage of Specific Commitments (percent)

'HIC' Members	All Other Countries	Large Developing Countries	Selected Arab Countries						
				Algeria	Bahrain	Egypt	Kuwait	Morocco	Tunisia
Market Access (MA):									
Average 'count' (sectors-modes listed as a share of GNS total)	53.3	15.1	29.6	0.65	2.58	16.77	28.39	23.23	8.39
Average coverage (sectors-modes listed as a share of GNS total, weighted by openness and binding scale factors)	40.6	9.4	17.1	0.48	1.94	10.48	10.65	11.21	3.71
Coverage/'count' (average coverage as a share of the average count)	76.2	62.3	57.7	73.9	75.2	62.5	37.5	48.3	44.2
'No restrictions' as a share of total offer made (no scaling)	56.4	47.3	36.7	75.0	75.0	47.1	25.0	28.5	23.1
'No restrictions' as a share of GNS total	30.5	6.7	10.9	0.48	1.9	7.9	7.1	6.6	1.9
National Treatment (NT):									
Average 'count' (sectors-modes listed as a share of GNS total)	53.3	15.1	29.6	0.65	2.58	16.77	28.39	23.23	8.39
Average coverage (sectors-modes listed as a share of GNS total, weighted by openness and binding scale factors)	42.4	10.2	18.8	0.48	1.94	11.69	11.61	15.65	3.55
Coverage/'count' (average coverage as a share of average count)	79.5	67.5	63.5	73.9	75.2	69.7	40.9	67.4	42.3
'No restrictions' as a share of total offer made (no scaling)	65.1	60.4	49.3	75.0	75.0	61.5	28.4	64.6	40.4
'No restrictions' as a share of GNS total	35.3	8.5	14.6	0.48	1.9	10.3	8.1	15.0	3.4
Memo items:									
No restrictions on MA and NT as a share of GNS total	28.0	6.4	10.0	0.48	1.9	7.9	7.1	6.5	1.5

Source: Compiled by the authors based on GATT (1994).

Table 9: Commitments by Sector

Sector (ISIC)	East Asia	South Asia	MNA	ECA	AM	AFR	HIC EUR	HIC NA	HIC Asia	Number of GATS sectors and modes of supply
Construction	8.7	1.5	3.6	11.6	4.2	3.0	13.3	17.3	13.3	20
Motor Vehicle Repair	0.7	0.0	0.0	1.3	0.3	1.1	2.9	3.5	1.7	4
Wholesale Trade	0.7	0.0	0.5	3.4	1.0	0.7	6.2	6.5	4.6	8
Retail Trade	0.7	0.0	0.3	4.3	1.5	1.0	6.3	6.5	4.4	8
Hotel/Restaurants	2.8	2.1	2.5	3.5	2.9	3.1	3.3	3.0	3.0	4
Land Transport	6.0	0.0	1.0	6.0	0.5	3.4	12.8	20.5	10.8	40
Water Transport	9.5	0.0	1.3	7.5	0.4	2.2	3.1	1.8	6.8	48
Air Transport	2.3	0.0	1.0	6.0	0.6	0.6	5.6	4.8	3.2	20
Auxiliary Transport	4.4	0.0	0.0	0.6	1.7	0.0	7.8	7.8	4.6	20
Postal Services	0.6	0.0	0.7	2.4	1.3	0.7	0.8	3.3	1.7	4
Basic Telecom	1.0	0.0	1.6	4.4	0.6	1.6	0.9	0.0	1.9	28
Value-added Telecom	011.9	3.3	8.7	19.5	5.7	8.7	23.6	24.5	19.5	28
Financial Services	24.5	6.9	13.2	26.3	14.9	13.2 ^t	38.5	41.8	32.6	60
Real Estate Services	0.7	0.0	0.8	0.0	0.7	0.8	4.3	6.5	4.4	8
Rental Activities	4.6	0.0	1.8	3.8	2.8	1.8	12.6	14.0	10.1	20
Computer-related	8.1	3.3	1.9	15.4	6.3	1.9	17.5	17.5	14.1	20
R&D Services	1.1	0.9	0.0	2.9	0.9	0.0	6.9	1.8	1.8	12
Business Services	31.0	3.9	8.4	45.9	16.3	8.4	77.1	70.5	50.5	108
Refuse Disposal	2.6	0.0	1.6	6.3	0.0	1.6	12.1	14.0	7.5	16
Education	1.0	0.0	0.8	10.5	1.2	0.8	6.4	3.3	4.7	20
Health and Social	1.2	2.0	1.3	5.1	1.5	1.3	7.6	1.5	3.0	24
Recreation/Culture	7.0	1.6	5.9	5.6	6.6	5.9	15.4	21.5	15.6	48

HIC-Asia: Australia, Hong Kong, Japan, New Zealand, Singapore

HIC-NA: Canada, USA

HIC-EUR: EU-15, Iceland, Norway, Switzerland

AM: Argentina, Bolivia, Brazil, Chile, Colombia, Mexico, Paraguay, Peru, Uruguay, Venezuela

ECA: Czech Rep., Hungary, Poland, Romania, Slovak Rep., Turkey

SA: Bangladesh, India, Pakistan, Sri Lanka

EA: China, Indonesia, Malaysia, Philippines, Thailand, Korea

MNA: Algeria, Bahrain, Egypt, Kuwait, Morocco, Tunisia

AFR: Cameroon, Cote d'Ivoire, Gabon, Ghana, Kenya, Nigeria, Senegal, South Africa, Zimbabwe

Table 10: Nominal and Effective Protection in Egypt

	EU Share of imports	Nominal tariff	Import weighted nominal tariff against EU	Import weighted nominal tariff against rest of the world	Effective rates of protection	
					Current effective rate including estimates of services protection	Current effective rate ignoring impact of protection in services
Animal products	83%	6%	9%	10%	-2%	3%
Chemicals and products, excl. petroleum	63%	13%	14%	13%	11%	26%
Clothing	12%	75%	59%	76%	43%	64%
Cotton ginning and pressing	40%	12%	22%	6%	13%	31%
Cotton spinning and weaving	57%	66%	28%	36%	43%	73%
Crude petroleum and natural gas	63%	41%	13%	10%	-6%	4%
Food processing	26%	49%	12%	11%	-2%	2%
Furniture	59%	25%	52%	64%	49%	56%
Glass and products	35%	24%	35%	36%	13%	32%
Iron, steel, other base metals	18%	9%	22%	24%	17%	36%
Leather products excl. shoes	62%	25%	40%	50%	47%	54%
Machinery and appliances	52%	11%	23%	28%	20%	29%
Mineral products, n.e.i.	48%	27%	23%	22%	9%	21%
Other extractive industries	47%	18%	12%	7%	-26%	9%
Other manufacturing	48%	11%	24%	27%	17%	31%
Paper and printing	45%	60%	18%	17%	9%	17%
Petroleum refining	43%	22%	12%	10%	-6%	1%
Porcelain, china, pottery	16%	72%	49%	60%	31%	39%
Rubber, plastic and products	34%	58%	21%	22%	9%	21%
Shoes	37%	24%	57%	91%	36%	44%
Transportation equipment	33%	33%	47%	55%	42%	92%
Vegetable products, foodstuffs	12%	4%	8%	3%	-2%	21%
Vegetable products, non-foodstuffs	37%	9%	12%	7%	-2%	17%
Wood, wood products, excl. furniture	40%	11%	13%	14%	-8%	9%
TOTAL	42%	29%	26%	29%	14%	30%

Note: The data have been adjusted to take into account the fact that extensive exemptions are granted to importers for imports of capital goods and certain intermediate inputs. The vector of nominal tariffs was adjusted downward for such goods by the proportion with which actual collected total tariff revenue falls short of "predicted" tariff revenue, i.e., what would be collected in the absence of exemptions. Alcoholic beverages and tobacco products are excluded in the analysis given extremely high nominal rates of protection/taxation. The 1990 input-output table was used, adjusted to reflect 1994 aggregate output. Trade data for 1994 were obtained from the UN Comtrade database. To allow for the fact that over time a mix of trade creation and trade diversion effects will increase the share of the EU in total imports of Egypt, tariff reductions incorporate a demand elasticity effect (the elasticity was set at 2). As a result, the EU share increases from 42 percent in 1994 to 64 percent at the end of the transition. Because no information is available on the magnitude of the implicit protection granted to services, the following "tariff equivalents" were used to calculate effective rates: construction, communications, financial services, business and professional services: 20 percent; for distribution, transport, storage: 40 percent.

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